

# THE ALTERNATIVES

# INTRODUCTION

Four land use plan alternatives, including the Bureau of Land Management's (BLM's) Proposed Land Use Plan, are described in this chapter to provide readers and decision-makers with a means of examining alternative actions and resulting impacts, using a combination of proposals.

The four alternatives described in this final environmental impact statement (FEIS) are: BLM's Proposed Land Use Plan, the Continuation of Existing Management Alternative, the Low Level Management Alternative and the High Level Management Alternative. Alternative themes precede the discussion of each alternative and provide commonality in the way proposed actions are presented to solve resource problems.

The alternatives are described in both the short and long term. The short term is an 8 year implementation period during which all proposed actions within this document would take place. All responses to range developments would be assumed to take place in the long term, 17 years after implementation of an action. Although several soil subgroups respond rapidly to some management practices and/or land treatments, and could be expected to respond sooner, this response is analyzed as taking place in the long term.

Table 2.5, at the end of this alternative description section, is a summary of the four alternatives and their effects by resource. Following Table 2.5 is a summary of environmental consequences by alternative (Table 2.6).

# THE PROPOSED PLAN

The Proposed Plan was selected by a team composed of the District Manager, Area Manager, Team Leader, and appropriate team specialists. It was reviewed by the State Director. It was selected based on (1) issues raised throughout the planning process, (2) public input received during the formal 90-day comment period and at meetings, and (3) the environmental analysis developed on the previously-formulated alternatives in the draft environmental impact statement (DEIS).

The Proposed Plan segment of this chapter describes the proposed management objectives by resource, the recommendations or actions required to obtain those objectives and the rationale for selecting a particular alternative level.

# HOW THE PROPOSED PLAN WILL BE IMPLEMENTED AND MONITORED

A record of decision will be issued following publication of this final environmental impact statement on the proposed resource management plan (RMP). Printed with the record of decision will be the final RMP. The final RMP will contain the decisions on all the land use recommendations proposed in this FEIS. It will also contain implementation criteria and a monitoring plan.

The implementation criteria will guide the order in which projects are implemented. These criteria will be tied to the budget process and will be applied annually to determine the projects that will be accomplished first, second, and so on. The monitoring plan will outline monitoring programs for evaluating the effectiveness of plan proposals such as forage allocations and wildlife improvements. Monitoring will determine whether assumptions were correctly applied and impacts correctly predicted. Monitoring will also help to establish long-term use and resource condition trends for the resource area and will provide valuable information for future planning.

The record of decision will be the approval authority for implementing the land use allocations and other actions contained in the final RMP. If budgetary capabilities permit, maps depicting the proposed plan actions by resource will be printed with the record of decision.

# PROPOSED LAND USE PLAN

The Proposed Plan is a modified version of the Preferred Alternative presented in the DEIS released to the public in April 1983. To aid in comparing the two versions, arrows have been placed in the margins to indicate changes to the Preferred Alternative.

# **Grazing Management**

# **Resource Objectives and Recommendations**

The resource objective for improve ("I") allotments would be to improve poor and fair range condition to fair and good range condition through implementation of improved grazing management and vegetative manipulation practices. Because of topography, soil limitations and wildlife habitat concerns, it isn't feasible to strive for 100% improvement on all poor and fair condition range. As a general guide, allotment management plans (AMPs) developed under this alternative would be designed to achieve 80% good condition on key livestock use areas (key areas being defined as drainage bottoms and flatter areas that normally receive at least moderate use and have the capability to respond to grazing treatments or vegetative manipulation practices).

The objective for maintain ("M") allotments, where it's economically advantageous to do so, would be to improve range condition and increase forage production through vegetative manipulation and prescribed grazing treatments while maintaining current satisfactory condition on the remaining "M" allotments.

The objective for custodial ("C") category allotments would be to continue custodial management.

The livestock production objective would be to maintain current proper use allocations in the short term, while increasing potentially available livestock forage in the "l" allotments and selected "M" allotments. Where current allocations exceed proper use, the objective would be to determine the proper use level through monitoring and allocate livestock forage accordingly.

Table 2.1 shows the recommended methods and treatments for allotments considered in this alternative as well as the management objectives for each "J" allotment.

# **Proposed Allocation**

In this alternative, 62,437 animal unit month (AUM) authorizations to 333 operators would continue in the short term. Intensive monitoring of actual livestock use and forage utilization would be conducted on the Dryhead and Upper Sage Creek allotments to determine proper stocking levels. Less intensive monitoring of stocking levels would be done on the remaining "I", "M" and "C" allotments. Any reductions in livestock use would be phased in over a 5 year period, according to BLM grazing regulations.

In the long term, it's assumed that increased forage, available under proper use, would be allocated to livestock. This increase is estimated to be 10,711 AUMs after allocations have been made to other resource values such as wildlife, watershed, soils, etc.

# **Grazing Treatments and Systems**

Sixteen new AMPs would be developed on "I" category allotments and six existing AMPs in the "I" category would be revised. Allotment-specific objectives would be developed to resolve resource conflicts and improve resource conditions on these "I" allotments. Grazing systems incorporating rest and deferment treatments would be designed to achieve these objectives. A total of 87,679 acres, of which 43,114 are in fair and poor range condition, would have improved grazing systems. Current grazing systems in 18 "M" category existing AMPs would be continued. Table 2.2 summarizes the proposed management in this alternative.

# **Proposed Range Improvements**

In this alternative, 21,520 acres of dense sagebrush would be burned, 1,700 acres dominated by blue grama and fringed sagewort would be chiseled or disced and 5,118 acres of crested wheatgrass would be haved or mechanically treated to increase forage production, improve range conditions and reduce erosion.

Structural improvements would include: 16 reservoirs, 10 wells, 2 spring developments, 31 miles of stockwater pipelines, 47 water catchments and 46 miles of fence. Water catchments, although costly, would also benefit some wildlife species.

A coordinated noxious weed program among BLM, local weed boards and landowners would be pursued in this alternative. The amount of acreage controlled would depend on the amount of cooperation of other land owners and weed control agencies. An accurate inventory of infested acres is needed. Since so many factors are involved that limit a meaningful estimate of acreage sprayed in this alternative, it's assumed for this analysis that only the current control program (45 acres) in the Paradise Allotment would be accomplished in the short term. The cost of this program would be \$15,000 as explained in the Continuation of Existing Management Alternative.

The total cost of the improvements in this alternative would be \$995,725 (see Appendix 2.1 for summary of current costs for each type of improvement).

**TABLE 2.1: METHODS AND/OR TREATMENTS CONSIDERED** Vegetative Manipulations Range improvements Grazing Treatments Native Range Crested Wheat Noxious Weeds Catch-Allotment ments **Pipelines** Wells Reservoirs Springs Sagebrush Fences Rest Defer X 1083 Х х 4101 Х Х Х 4125 х 4137 4940 Х Х Х Х 4945 Х Х Х Х Х Χ Х 4946 Х Х Х Х Х 4947 Х Х Х 4948 X Х Х X Х Х 4954 Χ Х 4969 Х Х Χ Х Х Х Х Х Х 4971 Х Х 5202 Х Х Х X X 5203 Х Х Х 5210 Х 5224 Х Х Х 5311 Х 5320 Х Х Х X 5321 Х Х Х Х Х 5356 Х 5367 Х Х 5371 Х χ... Subtotals 14,120 1,700 13 mi. 19 21 mi. (Units) 5,118 4111 Х Х 4114 Х 4119 X: Х 4131 X 4941 X 4988 X х 5213 Х Х 5214 Х Х Х 5217 Х 5225 Х Х Х 5235 Х Х Х 1033 Х Х Х Х Х Subtotals 58 (Units) 6,600 45 12 33 mi. 2 4 mi. 1005 Х 1011 χ X 4105 Х Х X Х 4115 Х Subtotals 800 (Units) х 6 mi. 1 **Grand Totals** 47 31 mi. 10 21,520 1,700 45 16 46 mi. 2 All Allotments 5,118

# TABLE 2.1: METHODS AND/OR TREATMENTS CONSIDERED (cont.)

Following are the objectives and the methods available to resolve the problems/conflicts within the 22 "I" allotments,

#### Range Condition

Objective: Strive to achieve and maintain 80% good and excellent range condition on key areas within an allotment.

Methods: Implement grazing systems (Alt. A, C, D), vegetative manipulations, (Alt. C, D), reduction in livestock numbers (Alt. A, B, C, D).

#### Season of Use

Objective: Provide periodic deferment from grazing during the growing season for native species.

Methods: Implement grazing systems (Alt. A, C, D), develop tame pasture, i.e. crested wheatgrass for spring use (Alt. C, D), adjust season of use (Alt. A, B, C, D).

#### Carrying Capacity

Objectives: Where monitoring indicates the AUMs allocated to livestock in an allotment exceed the current carrying capacity, the stocking level would be reduced to ensure proper use.

Methods: Reduce livestock forage allocations to proper use level (Alt. A, B, C, D).

#### Distribution

Objectives: Improve distribution to alleviate or eliminate livestock concentration areas.

Methods: Range improvements, i.e. fences, water developments (Alt. A, C, D), salting and mineral placement (Alt. A, B, C, D).

#### Watershed

Objective: Stabilize watershed conditions where grazing management or range condition is contributing to excessive erosion.

Methods: Implement grazing systems (Alt. A, C, D), vegetative manipulations (Alt. C, D), reduce livestock forage allocation (Alt. B).

# "I" Category Allotments Problems and/or Conflicts

Allotment	Range Condition	Season of Use	Carrying Capacity	Distribution	Watershed
1083	X	X		Х	
4104	X	X	X	X	x
4125	X	X	X		
4137	X	X			
4940	X			: X	
4945	X				
4946	X	X			A Committee of the Comm
4947	X				
4948	X			· X	
4954	X				
4969	` <b>X</b>	X			X
4971	X	X		Χ	×
5202	X	X		X	
5203	X	X		X	x
5210	X			X	<b>X</b>
5224	. <b>X</b>	X			×
5311	X				X
5320	X	X			
5321	X				×
5356	X				X
5367	. X	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		X	
5371	·- > , <b>x</b>				X

Source: Billings Resource Area, 1982.

# Monitoring

Monitoring would vary with management category (see Table 2.2). Permanent trend studies are located in 67 allotments and monitoring would continue, with the 22 "I" allotments receiving the greatest emphasis. Actual livestock use and utilization data would be collected on "I" allotments where there is a need to closely monitor the level of livestock use.

# Rationale

Current policy directs the BLM to focus available funding and manpower on those areas where problems and conflicts exist. The inventory conducted in preparation for this RMP was designed to assess the current condition and identify problem areas. From the information available, each allotment was placed in one of three categories; "I" Improve, "M" Maintain, or "C" Custodial. Attention would be focused on the "I" allotments with second priority on those "M" allotments where less critical problems exist and finally the "C" allotments where conflicts arise.

A range survey was conducted in the 1960's and AUMs available to livestock, after consideration for wildlife. vegetation and watershed maintenance, were adjudicated to the livestock operators. Those AUMs that were traditionally used but were in excess of what the survey showed were carried in suspended nonuse. The 1981 survey showed for the most part, that the adjudicated AUMs on the public lands were an accurate reflection of the available forage under proper use. No adjustments in authorized use were proposed initially. However, those allotments where the adjudicated preference appears to be excessive, were placed in the "I" category and would be monitored intensively to determine a proper stocking level. All other allotments would be monitored at a level to determine if the allotment objectives are being met and, in the case of those allotments in satisfactory condition, at a level to detect any undesirable changes.

Range improvement efforts would be concentrated on the "I" allotments. Improvements displayed in this document are estimates. These improvements are needed to improve distribution and facilitate management needed to resolve grazing related conflicts. Vegetative manipulations are required to improve conditions for livestock, watershed and wildlife because grazing man-

agement would have no effect or the response period would be extremely slow. Each proposed improvement must have a cost/benefit analysis completed before approval. The Range Program Summary which will be written following this RMP will be prepared in consultation with the range users and other agencies. Each project will be analyzed as to its cost effectiveness and assembled in priority within, as well as between, allotments. Final project submissions may be different than those displayed in this document.

# Wild Horse Management

This proposed action would balance population levels with the forage available for horses by herd area. The population of a herd area would be held at a level that provides opportunity for improvement of range condition, herd health and viability, wildlife habitat and watershed condition, or maintains these in good condition.

# Resource Objectives and Recommendations

The resource objectives in this proposed action would be to maintain a viable breeding herd which could perpetuate the characteristics of the Pryor Mountain wild horses; maintain 2,775 acres that are currently in good range condition; prevent further deterioration of range sites in less than satisfactory condition and to achieve an upward trend in range condition on those range sites. The primary benefit will be a healthier, more viable horse herd.

Under this proposed action, the initial stocking level would be 121 adult wild horses; 46 on Tillett Ridge, 44 on Sykes Ridge and 31 on the Dryhead herd area. These numbers are based on current estimates of grazing capacity for each herd area. These numbers are also dependent on the continuation of current agreements which allow wild horses to graze areas outside the designated wild horse range boundary.

The initial target allocation for wild horses would be 121 head (it's estimated that 80% of this number would be 2 years old or older). Actual numbers may vary from year to year due to variations in foal crops, natural death loss, forage productivity and other factors including budgetary constraints.

Type of Allotment	Category	Number	Acres	AUMs
Existing AMPs	Maintain	16	65,590	12,259
Existing AMPs	Custodial	2	42,553	2,872
Revised AMPs	Improve	6	46,486	4,809
New AMPs	Improve	16	41,193	8,411
New AMPs	Maintain	140	144,634	24,059
New AMPs	Custodial	213	58,932	10.027
Total		393	399,388	62,437

During the short-term period (8 years), monitoring studies would be conducted to confirm or modify the initial estimates of grazing capacities and trends in habitat conditions. Data from these studies would be used to modify the initial target allocation, either upward or downward.

During the long term (25 years), the number of wild horses in a herd area would be permitted to increase if monitoring showed that additional forage were available. Ultimately, the Pryor Mountain Wild Horse Range (PMWHR) has the potential to support up to 179 wild horses yearlong. This assumes all areas now grazed by the wild horses would continue to be available to the horses. However, the projected long-term population increase in this alternative is considerably less than the potential level of 179 head since no rotational grazing systems would be in effect.

Improved wild horse grazing habits and distribution would be attempted by controlling their access to water sources. When the average utilization on important grasses within the area serviced by a water source reaches 45% by weight, access to that water source would be denied. This would stimulate the horses to move to another watered area.

To assure that non-public lands remain available for grazing by wild horses, the United States should acquire 1,560 acres from the State of Montana, and 680 acres of private land (see Map 1—Map Pocket).

The emphasis in herd management would be to limit the reproduction rate and perpetuate the characteristics of the Pryor Mountain wild horses. This would necessitate beginning a selection program to retain only those wild horses with conformation, color and breeding (genetic) characteristics typical of the Pryor Mountain wild horses.

This proposed action would require altering the current sex ratio so that it's heavier to stude than the current population. This would reduce the foal crop and minimize the need for excessing wild horses.

When it's necessary to reduce the number of horses within a herd area, the excess horses would, if possible, be relocated to one of the other herd areas. If this option isn't available, the excess horses would be disposed of through the adoption program or other legal processes.

A Wild Horse Herd Management Plan will be developed jointly between the National Park Service (NPS), Forest Service and BLM, with BLM as the lead agency after the RMP is completed and will incorporate the management direction provided by this plan.

# **Proposed Range Improvements**

This proposed action requires minimal additional manmade improvements or facilities. Five water catchments would be required to improve grazing distribution by bands of horses. About 2 miles of fence would be needed for improving the efficiency of capturing horses and 5 miles for fencing the south boundary of the range. The estimated cost to implement this proposed action is \$56,500. In the short term, the annual excessing of horses would continue, requiring an estimated \$21,000 annually to gather and excess an average of 30 horses. In the long term, altering the sex ratio would reduce the foal crop, but some level of annual excessing may still be

required. Costs in the long term cannot be estimated because the timing of the sex ratio reversal and its impacts to horse numbers has not been established.

# Monitoring

Management progress would be evaluated to assure the level applied and the decisions made are compatible with multiple use objectives for the PMWHR. Vegetation monitoring would focus on utilization levels, movement toward reaching the stated objective of the Herd Management Area Plan (HMAP) and long-term trend (change in condition).

Studies on the wild horses would include population size, animal distribution, foraging habits and population characteristics. The studies on population characteristics would include sex ratio, age structure, social structure, animal condition and special characteristics identified in the HMAP such as selection of color.

#### Rationale

The primary objective is to maintain a healthy, viable herd that displays the characteristics typical of the Pryor Mountain wild horses. In order to accomplish this, the range must be kept at a condition that will provide both the quantity and quality of forage needed to sustain the herd. The Bureau has an obligation to other agencies as well as private individuals who own land within the horse use areas to ensure the basic soil and vegetative resources are not degraded.

The 1981 Ecological Site Inventory determined what stocking level the range could support in its current condition. This is a target allocation and monitoring studies would be established to determine what, if any, adjustments are needed.

The proposed water catchments are to improve wild horse distribution through the availability of water. The BLM is currently exploring new designs for catchments to improve their efficiency, aesthetics, and lower the initial cost and maintenance costs.

Two miles of fencing is proposed to facilitate the capture of the horses and is designed to reduce the stress horses are subjected to. The south boundary fence is needed to contain the horses within the range and eliminate encroachment by livestock.

# Wildlife Management

The Federal Land Policy and Management Act (FLPMA) of 1976 chartered BLM with the responsibility of maintaining or enhancing the fish and wildlife habitats that occur on the public lands.

# Resource Objectives and Recommendations

The Billings Resource Area operates under a number of general wildlife habitat management objectives which are utilized Bureau-wide. Each objective is mandated and/or supported by specific Federal regulation or legislation. These wildlife program objectives are common to each alternative level discussed in this RMP/EIS. The BLM wildlife habitat management program places special emphasis on, but is not limited to the protection, maintenance and enhancement of:

- Crucial habitats for big game, upland game birds and waterfowl.
- Crucial habitats for nongame species of special interest and concern to state or other Federal agencies.
- Wetland and riparian habitats.
- Existing or potential fisheries habitat.
- Habitat for state or federally listed threatened and/or endangered species.
- These commitments to the wildlife resources vary by alternative only in the level of effort devoted to each element within the program. The level of effort undertaken annually is dependent upon national priorities, Washington Office direction and the availability of funding and manpower to effectively complete the workload.
- The level and intensity of wildlife habitat management activities presented in this proposed action have been selected based on feasibility, opportunity, need and associated impacts by other resource programs.

# Wildlife Improvements

Five upland game bird watering devices would be installed in areas where watering sources are unavailable and no other watering facilities are planned for development. Fifty waterfowl nesting islands would be constructed in existing reservoirs in Musselshell and Yellowstone Counties. Seven existing reservoirs would be fenced to achieve desirable aquatic habitat for waterfowl and shore birds. Of these seven, three reservoirs would be fenced completely with alternate watering facilities installed and the other four reservoirs would be fenced on the upper 1/3 to include approximately 50 upland acres per reservoir. Twenty-five acres of dense nesting cover would be planted adjacent to Big Lake. Twenty raptor nest sites would be installed adjacent to 10 prairie dog colonies and at selected locations within the Yellowstone River Valley. If suitable locations are found, three fisheries reservoirs would be constructed near urban communities. With the use of acceptable grazing systems, 80% of the woody floodplain type of vegetative composition totalling approximately 41 miles within the category "I" allotments, would be maintained or improved to good or excellent range condition.

The maintenance of existing facilities would be completed as needed and would receive priority for available funding over the construction of the above mentioned new project developments.

# **Habitat Management Plans**

A habitat management plan would be developed for chukar partridge. In the long term, consideration would also be given to developing habitat management plans for such species as mule deer, antelope, bighorn sheep, sage grouse, sharptail grouse, waterfowl, raptors, prairie dogs and fisheries. These species have been selected due to their uniqueness in the resource area, obvious opportunities for enhancement or public demands for increased availability. Completion of these plans would be dependent upon availability of funding and manpower.

# **Land Acquisition**

A program to identify a limited amount of non-Bureau lands desirable for fish and wildlife habitat would be 19

initiated. Attention would be focused on waterfowl nesting areas such as Halfbreed and Big Lakes, big game winter ranges, high value upland game bird habitat, active and/or potential fisheries habitats and important nongame and threatened and endangered species habitats. Future acquisition of these lands would occur predominantly through land exchange.

# Monitoring

The wildlife program would focus on completing 60,000 acres of terrestrial habitat monitoring yearly. This would allow a 3 year cyclic collection and update of habitat condition on all big game winter concentration areas, upland game bird nesting areas, the PMWHR, the 24 implemented AMPs and those "I" and "M" allotments in which potential habitat conflicts exist. Surveys would be conducted in 12 selected waterfowl concentration areas to collect utilization and average annual brood numbers. Approximately 300 acres of known prairie dog colonies would be surveyed annually for the occurrence of black-footed ferrets and to update colony size data. Due to the relatively small acreages of prairie dog towns occurring on public lands, this intensity would provide a minimum of a 3 year cyclic update of all colo-

Approximately 10 miles of streams with active fisheries would be surveyed per year to collect species occurrence and habitat condition data. This effort would concentrate on the Musselshell, Clarks Fork, Yellowstone, Sage Creek, Crooked Creek and Bad Canyon Creek drainages. Three reservoirs would be surveyed annually to determine their suitability for fisheries stocking. A very limited number of existing reservoirs have fisheries potential and at this intensity, all those possessing potential can be evaluated in the short term.

# Coordination

All major wildlife habitat enhancement projects would be coordinated with regional personnel of the Montana Department of Fish, Wildlife and Parks (MDFWP). As mandated in a joint memorandum of understanding with the MDFW&P, all projects involving vegetative manipulation would be presented to the regional personnel for comments and recommendations in advance of project initiation.

Informal and formal consultation with the U.S. Fish and Wildlife Service (USFWS) would be initiated on all proposed actions which may affect any Federally listed threatened or endangered species. Consultation would be done in accordance with Section 7 of the Endangered Species Act, as amended.

A state-Federal interagency team of wildlife biologists has been established to review and make final recommendations on the application of the Federal coal program wildlife unsuitability criteria for the Bull Mountain area. This effort would be continued in consultation with the USFWS and the MDFWP.

# Implementation Costs

It is estimated that the total cost of improvements to implement this proposed action is \$75,500 (see Appendix 2.2 for a summary of estimated costs for each type of improvement).

#### Rationale

- The level of surveys and monitoring proposed would allow a 3 year cycle for intensive studies on all big game and upland game bird crucial habitats and all existing fisheries habitats. Annual waterfowl surveys would be conducted in major concentration areas. Threatened and endangered species habitat, or potential habitat would be surveyed annually. Inventories needed to fully apply the Federal coal wildlife unsuitability criteria numbers 9 through 15 would also be completed prior to leasing any Federal coal.
- The decision to complete a habitat management plan (HMP) for chukar partridge was made because of the uniqueness of the species to the Billings Resource Area. The major portion of chukar year around habitat within the resource area is on public lands. Upon completion of the coordinated management plans for grazing management, species such as mule deer, antelope, bighorn sheep, sage grouse, sharptail grouse, waterfowl, raptors, prairie dogs and fisheries will receive priority consideration for HMP development where the coordinated management plans could not meet the overall objectives for the individual species.
- All improvements were selected based on feasibility, compatibility with other proposed actions and the level of development which has been historically funded. The levels chosen would also allow for annual maintenance of all existing facilities.
- Nonstructural improvements were chosen pursuant to BLM's mandate under Executive Orders 11988 and 11990 to preserve, protect and if necessary, restore floodplains and wetlands to their natural function.

# **Timber Management**

# **Resource Objectives and Recommendations**

The resource area would meet local demand for timber products through small negotiated sales. Additionally, occasional advertised sales would be held which could amount to sales up to 1 million board feet (MMBF) being offered in the Twin Coulee area. An annual cut of 70 thousand board feet (MBF) over 30 acres is expected to occur. In the short term (8 years), 560 MBF would be harvested on 240 acres. In the long term (25 years), 1,750,000 would be harvested on 750 acres.

A total of 9,500 acres of forested land would be protected from cutting, except where needed for other resource value or concern such as watershed, safety or wildlife. The protection area includes the Pryor Mountain WSAs, Bad Canyon, Young's Point, Hamilton's (Asparagus) Point, Shepherd Ah-Nei and the Acton area.

# Rationale

- This proposed action would allow continued small negotiated sales and occasional advertised sales to meet the local demand for timber products. This type of timber management would allow a reasonable harvest of timber products while protecting other resource values such as watershed and wildlife habitat.
- A sale of up to 1 MMBF could occur in the Twin Coulee area if it isn't designated wilderness by Congress and if local demand warrants.

# Coal

The scenario of two coal mines (150,000 and 300,000) as described in the Low Level Management Alternative is projected for this alternative as well.

# **Resource Objectives and Recommendations**

There are 9,360 acres of Federal coal in the Bull Mountains found acceptable for further consideration for leasing, pending further study (see Figures 2.1 and 2.2). These areas overlie Federal coal which is of high or moderate development potential, based upon a 20:1 (overburden to coal) stripping ratio. See Table 2.3 for a breakdown of the acreages and tonnages dropped and carried forward for further consideration for leasing pending further study.

Current industry standards for coal recovery average 150 feet of overburden or a 6:1 stripping ratio, whichever is less. In the Bull Mountains, average thickness of the combined Mammoth-Rehder bed is 11 feet and the McCleary bed is 8 feet. Disregarding the interburden which separates the coalbeds, surface mining to a depth of 114 feet would be the current economic limit. This fact would greatly constrict mineable acreage of the area found acceptable for further consideration pending further study. During the Coal Activity Planning Process, the Regional Coal Team must give strong consideration to surface mining only of the high potential coal (coal within the 10:1 stripping ratio line) if the coal from the Bull Mountains is to be economically competitive. This would tend to discourage large surface mining operations, yet support the smaller operations described in the mining scenario (see Appendix 2.3). It is reasonable to assume that the deeper coal resource would be developed through underground mining methods. The overall effect of this activity planning recommendation would be a reduction of the area found acceptable for further consideration pending further study, from 9,360 acres (20:1 ratio) to 4,704 acres (10:1 ratio). Appendices 1.9, 2.4 and 2.5 show the effects this change would have on the unsuitability criteria. More specific information concerning the surface owner consultation process is included in the Billings Resource Area management situation analysis which is available for inspection in the Billings Resource Area Office.

All the Federal coal which is mineable by underground methods is suitable for further consideration for leasing or exchange pending further study. The BLM would not apply coal unsuitability criteria to these areas until a site-specific mine plan is filed, detailing the proposed location of surface facilities.

This decision also eliminates from further consideration for leasing (Federal coal which is potentially surface mineable) the following acreages in the Bull Mountains:

10,920 acres eliminated because of surface owner opposition

2,480 acres eliminated because lands are subdivided

418 acres eliminated as a result of the unsuitability application

Figure 2.1: Mammoth Rehder Coal Bed — Application of Planning Screens. (20:1 ratio)

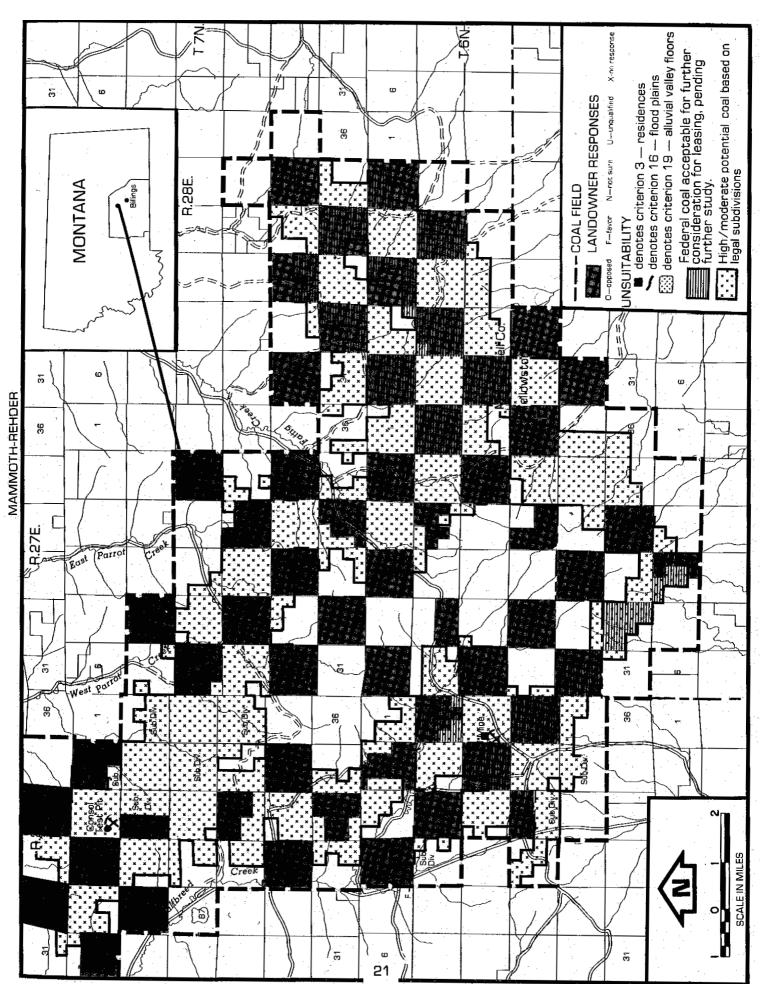
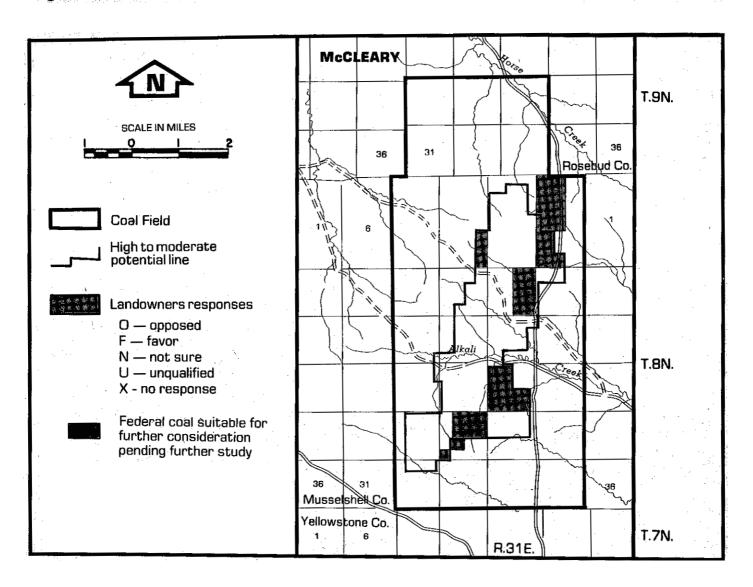


Figure 2.2: McCleary Coal Bed — Application of Planning Screens.



# TABLE 2.3: RESULTS OF SURFACE OWNER CONSULTATION AND APPLICATION OF COAL UNSUITABILITY CRITERIA

# High/Moderate Potential Federal Strippable Coal

		22,880 acres	326 MM tons
1.	Surface Owner Consultation	Unacceptable Co	al
	Surface owners opposed to leasing for surface mining	10,920 acres	174.3 MM tons
	Federal lands within established subdivisions	2,480 acres	36 MM tons
	Federal coal acceptable for further consideration	9,480 acres	116.7 MM tons
11.	Unsuitability Criteria Application	Unsuitable Coal	
	Criterion #3: roads dwellings	0 acres 24 acres	O tons 350,000tons
	Criterion #16: floodplains	96 acres	1,500,000 tons
	Criterion #19: possible AVF	298 acres	O tons%
	Federal coal suitable for further consideration pending application of Criteria #7 and #9-15	9,360 acres米米	114.85 MM tons∻∻

 $\star$  Final determination of alluvial valley floors has not been made; acreage will not be eliminated until final determination by OSM.

\*\* These acreages and tonnage totals consider the overlap of Criteria nos. 5, 3, 16, and 19.

Source: BLM, 1982

- This alternative specifically seeks to encourage underground mining at the expense of other mining methods in the Bull Mountains. Large scale surface mining of Federal coal in the Bull Mountains would be specifically discouraged and this would be the recommendation made later in activity planning before the Regional Coal Team.
- Federal coal exchanges would be considered on a caseby-case basis.
- Production from the small surface lease (M-052647) in the Bull Mountains would be maintained through emergency leasing.

#### Rationale

The High Level Management Alternative was selected as the Proposed Action because it would allow the BLM to comply with the multiple use mandates established by FLPMA and the 43 CFR 1600 regulations governing multiple use planning. Furthermore, selection of the High

Level Management Alternative would allow the BLM to comply fully with the Surface Mining Coal Reclamation Act (SMCRA) and the 43 CFR 3400 regulations established to govern the Federal coal management program. This alternative contains the best mix of uses in the judgment of BLM management. The coal area found suitable for further consideration for leasing pending further study would have criteria 7 and 9 through 15 fully applied prior to leasing. Where overriding multiple use values not previously identified are found to exist. the affected coal would be removed from further consideration for coal leasing. Due to the economic feasibility of mining coal at depths greater than 100 feet (the moderate potential coal) and the larger surface acreage disturbed, it would be recommended to the Regional Coal Team during the Coal Activity Planning Process, to allow surface mining only within the 10:1 stripping ratio (high potential coal). Underground mining would be encouraged, because it is far less environmentally disruptive.

# Oil and Gas Leasing

The 70,000 acres identified in the High Level Management Alternative would be considered "sensitive" to oil. and gas leasing. The draft RMP/EIS listed nine such sensitive areas. An additional seven areas have been added to the sensitive area list (refer to Appendix 2.6 and the Map Pocket Overlay). Lease applications within these areas would be routed to the resource area for application of appropriate special stipulations. Assessment may determine, especially within the PMWHR, that some areas are unsuitable for oil and gas exploration and subsequent development. Where "no surface occupancy" is recommended for an area over 1/2 mile from an area which may be occupied, the resource area would instead recommend no leasing (since directional drilling could not tap a possible reservoir under that land). Occupancy in other areas may be severely restricted. The remaining 579,433 acres in the resource area will be leased with standard stipulations.

# Rationale

This proposed action would allow BLM to comply with the multiple use mandates established by FLPMA by allowing leases with standard stipulations on 579,443 acres and special stipulations on 70,000 acres considered sensitive to oil and gas leasing. This type of management would allow the oil and gas industry a reasonable opportunity to lease and explore, while protecting the various other resources present and provide a greater degree of protection for especially sensitive areas.

# Resource Objectives and Recommendations

Impact assessment of the High Level Management Alternative indicates that resource conflicts would not, in most cases, be completely resolved if oil and gas leases are issued with special stipulations within the PMWHR, and exploration drilling follows.

The objectives would be to protect sensitive resource values, to provide a quality experience for visitors consistent with a wild horse range, not to interfere with wild horse, management practices, and to be consistent with other agency plans for adjacent areas.

# **Land Tenure Adjustment**

#### Resource Objectives and Recommendations

- The resource objective of this proposed action is to adjust the resource area land and/or mineral base using various Bureau authorities (exchanges, sales, Recreation and Public Purpose patents, etc.) to improve management of both public and private land.
- Public response to the draft EIS proposal for Land Tenure Adjustment was unanimous in support of the resource area's use of land exchanges to acquire tracts or block up public land with greater public access, recreation, wildlife habitat, or other resource values. The public responses were generally opposed to disposal of public lands by direct sale. Some concern was expressed regarding the effects of land disposal on surrounding landowners and grazing permittees.

The draft RMP/EIS identified 5,237 acres of public land as suitable for disposal within the Land Tenure Adjustment Area. Within the same area, 3,622 acres were identified as suitable for exchange. Following public comments, the resource area staff reevaluated 19 tracts of public land previously identified for disposal. This evaluation reduced the total acreage in the disposal category from 5,237 to 3,837 acres (see Appendix 2.7).

In light of public responses and further clarification of land tenure policy at the national and state levels, land exchange would be the predominant method of land adjustment and/or disposal. This adjustment in the proposed action makes the 3,837 acres of public land categorized for disposal within the Land Tenure Adjustment Area available for disposal by exchange, as well as by sale or other authorized methods of disposal. Public land in the Land Tenure Adjustment Area available for exchange now totals 7,459 acres.

Twenty-six thousand three hundred and fourteen (26,314) acres within the Land Tenure Adjustment Area have been categorized for retention.

Two thousand three hundred and eighty-two (2,382) acres of public land have been categorized for further study. Lands placed in this category would be evaluated later using the criteria defined in the State Director Guidance for Resource Management Planning in Montana and the Dakotas (Appendix 1.6).

It should be noted that land base adjustment is a tiered process involving two entirely separate and distinct actions—categorization and disposal. Categorization involves the application of certain criteria to a given tract or zone of public land for initial identification of the potential for disposal or retention. This streamlines the land tenure adjustment process by helping the resource area to focus on those lands which initially meet the disposal criteria outlined in Appendix 1.3 and in the State Director Guidance (Appendix 1.6).

Actual lands action by sale, exchange or acquisition requires a site-specific analysis prior to the recommendation. The analysis is handled in subsequent activity planning through the Environmental Assessment/Land Report (EA/LR). The EA/LR is an interdisciplinary document which examines and evaluates the effect of the proposed action on all affected resource values, which could include vegetation, watershed, wildlife, recreation, aesthetics, air quality, cultural resources, public access, and the social and economic impact to adjacent landowners, grazing permittees, and the local community.

Section 206(a) of FLPMA requires that land exchanges serve the public interest. This section of FLPMA states that an exchange may occur if "the values and objectives which Federal lands or interests to be conveyed may serve if retained in Federal ownership are not more than the values of the non-Federal lands or interests and the public objectives they could serve if acquired".

- Likewise, public lands to be disposed of by sale must meet certain FLPMA requirements. Section 203(a) of FLPMA states that public lands may be sold if:
- such tract because of its location or other characteristics is difficult and uneconomic to manage as part of the public lands, and is not suitable for management by another Federal department or agency; or
- such tract was acquired for a specific purpose and the tract is no longer required for that or any other Federal purpose; or
- disposal of such tract would serve important public objectives, including but not limited to, expansion of communities and economic development, which cannot be achieved prudently or feasibly on land other than public land and which outweigh other public objectives and values, including, but not limited to, recreation and scenic values, which would be served by maintaining such tract in Federal ownership.
- In summary, before a proposed exchange or sale of public land can proceed, the EA/LR must show that the proposed action accrues significant benefit to the public. The same showing is required in a minerals exchange.
- When EA/LR findings are such that a public land parcel can be disposed of either by exchange or sale, and management concurs, a Notice of Realty Action (NORA) is published once in the Federal Register and at least once a week for three weeks in a newspaper with distribution in the area of the proposed action. The NORA describes the proposed action and specifies a 45 day period for public review and comment. The location of the office where individuals can review the case file is also included. Following the 45 day period, any adverse comments are responded to by the District Manager and/or State Director, who may vacate or modify the proposed action based on the comments received.
- In addition to the official publication of the NORA in local papers and the Federal Register, adjacent landowners, Governor, Congressional delegation, county commissioners, and other interested parties are sent a letter of notification with a copy of the NORA attached. If the county commissioners feel it is necessary, a public hearing on the proposed action would also be held.
- Several individuals expressed a concern about how the retention and disposal criteria would be applied to the uncategorized lands outside of the Land Tenure Adjustment Area. In order to address this concern, the resource area staff has delineated the remaining portion of the resource area into retention and disposal zones (see Map Overlay, Map Pocket). Approximately 364,350 acres were delineated in retention zones, while approximately 52,500 acres were delineated in disposal zones outside of the initial Land Tenure Adjustment Area described in the draft EIS. The lands in the disposal zones include approximately 10,150 acres of public land adjacent to U.S. Forest Service land along the Beartooth Face and in the Twin Coulee Wilderness Study Area (WSA) that would be proposed for exchange

to the U.S. Forest Service. These tracts of public land would thus remain in public ownership. The remaining 42,350 acres of public land in the disposal zones would be suitable for disposal by any method, but predominantly through exchange (see Land Tenure Adjustment section of Table 2.5).

Exchanges would also be the predominant method of land disposal for public lands outside of the Land Tenure Adjustment Area. Lands to be acquired by exchange would generally be located within retention areas, while lands to be disposed of by exchange or sale would primarily be located in disposal areas. Based on site-specific application of the land tenure adjustment criteria in the State Director Guidance, some lands within a disposal zone, such as critical wildlife habitat, may be retained, while some lands in a retention zone may be disposed of.

Lands to be acquired should:

- facilitate access to public land,
- 2. maintain or enhance important public values and uses
- 3. maintain or enhance local social and economic values,
- facilitate implementation of other aspects of the Billings RMP, including:
  - A. lacquisition of non-BLM lands within the
  - B. facilitation of future mineral development, and/or
- facilitate other criteria addressed in the State Director Guidance.

Existing data and an interdisciplinary analysis were utilized in delineating the boundaries of the zones (retention, disposal and further study). Specific tracts within these zones may be readjusted or recategorized as a result of site-specific analysis and input during the activity planning stage.

#### Rationale

Adjustment in the pattern of public land and minerals ownership within the resource area would: (1) allow for more efficient and economic management, (2) facilitate acquisition of lands with higher public values and uses and (3) facilitate implementation of other recommendations within this and other planning documents.



# Classifications

Under the Classification and Multiple Use (C&MU) Act of 1964, three areas were classified for retention (28,586 acres). They were also segregated from appropriation under the agricultural land laws, from sales under Section 2455 of the Revised Statutes, and from the operation of the mining laws but not from mineral leasing.

# Resource Objectives and Recommendations

- The resource objective of this alternative would be to protect from mineral entry those areas which contain significant resource values and BLM constructed improvements (see Figure 1.2 and Appendix 2.8).
  - Following public input and subsequent discussions with BLM archeologists, it was determined that three highly significant and unique cultural and/or paleontologic sites were located in areas covered by C&MU classifications. These are the Crooked Creek Natural Area. Petroglyph Canyon and Weatherman's Draw. The Crooked Creek Natural Area is protected from certain activities under C&MU Classification W-15468, while Petroglyph Canyon and Weatherman's Draw are included in C&MU Classification M-7991. Lifting the C&MU classifications and allowing mineral exploration in these areas could irreparably damage or destroy the extremely valuable resources contained there. It is. therefore, recommended to leave the C&MU classifications intact in these three areas until such time as a BLM protective withdrawal can be enacted.
- Upon closer inspection, it was further discovered that Sykes Springs and Corral was not located within C&MU Classification W-15468, but rather within an area withdrawn from mineral entry for the PMWHR. Revocation of the C&MU classification would, therefore, not affect this site.
- In addition, Mystery Cave is not located within C&MU Classification M-7991. It was previously included in an area withdrawn for the Bighorn National Recreation Area. This withdrawal has since been revoked, but an opening order was not published. The area is, therefore, not open to mineral entry. In the future, should management decide to issue an opening order for this area, a formal BLM protective withdrawal will be sought for Mystery Cave.
- As stated in the draft RMP/EIS, the C&MU classifications will be continued for the Britton Springs Cabin and Corrals and Cottonwood Springs and Corral.
- Because of the above-mentioned change in this proposed action, C&MU classifications will be continued on approximately 980 acres of public land, as opposed to 50 acres as stated in the draft RMP/EIS. The remaining portions of the C&MU classifications will be revoked.

#### Rationale

Areas containing special resource values or Federal improvements such as those stated above, require special protection from mineral entry. Areas with only nominal resource values can be adequately protected by the 43 CFR 3809 surface protection regulations.

# **Recreation Access**

# **Resource Objectives and Recommendations**

The Proposed Action is a combination of the Continuation of Existing and High Level Management Alternatives.

Access to the following public land areas would be pursued in this priority:

- Exchanges would be sought through the land tenure program for lands adjacent to the Yellowstone, Musselshell, Boulder, Stillwater, Clarks Fork and Bighorn Rivers. Lands would be sought along the Yellowstone River and priority consideration given to areas near Big Timber, Springtime, Huntley and Pompeys Pillar (these locations have been recommended by the MDFWP to meet floating demand);
- Acquire legal and physical access to the following public land areas: (A) block of public lands 7 miles west of Pompeys Pillar bordering the north bank of the Yellowstone River; (B) Young's Point, approximately 3 miles southwest of Park City; (C) Bad Canyon walk-in access, located approximately 15 miles west of Absarokee. Where vehicular access is required, travel may be restricted to designated roads or trails. These restrictions would be determined after preparation of detailed activity plans; and
- Legal public access would not be pursued to the large block of public land roughly bounded by the communities of Bridger, Belfry and Warren (Triangle Area) and the west side of Red Pryor Mountain unless access across privately-owned lands is denied.

### Rationale

Expanding population pressure in the greater Billings area has created a demand for more recreation sites or more access to existing sites on public land. This proposed action would allow BLM to pursue recreational access to key areas without making significant changes in the land ownership pattern.

#### Off-Road Vehicle Use

# Resource Objectives and Recommendations

The BLM would attempt to meet the demand for offroad vehicle (ORV) use on public land, while protecting watershed, visual resources and other conflicts which may occur between ORV users, adjacent landowners and permittees. The following proposed action is recommended:

- The 3,800 acres in the Acton area would be designated as restricted to existing roads and trails and authorized use.
- Off-road vehicle use in the Hamilton's (Asparagus) Point area would be limited to the main access road and the parking area.
- The Shepherd Ah-Nei area, east of the county road would be designated as limited to authorized use. Authorized use would be restricted to persons holding the grazing lease, and to BLM employees for the purpose of resource management or other similar

types of authorizations. This designation affects about 460 acres. The ORV use in the northern portion of the Ah-Nei area west of the county road (approximately 3,090 acres) would be limited to designated roads and trails and authorized use. The southern portion of the area (512 acres) would remain open (see Figure 2.3 . In the event of excessive damage, this area may be closed entirely to ORV use.

- 4. A 70 acre area in the South Hills would be permanently closed to all vehicle use and a 1,200 acre portion of the area would be closed to use by 4-wheeled vehicles (see Figure 2.4). Management of the South Hills ORV usage through a cooperative agreement would be pursued with the Billings Motorcycle Club and the Cedar Park subdivision.
- 5. Existing ORV restrictions in the Pryor Mountains (see Figure 2.5) would remain in effect except that the Bear Spring Road #1, Timber Canyon Road #2, Water Canyon Road #3, Inferno Canyon Road #4 and Demi-John Flat Road, Road #10, would be designated open. These road openings total approximately 9 miles. Turkey Flat Road, Road #11, would be designated closed except for authorized use. This would result in approximately 3 miles of road closure. The ORV use may be limited to designated roads or trails if legal access is acquired to the area 7 miles west of Pompeys Pillar and to Young's Point.

# Rationale

This proposed action would allow BLM to manage a reasonable combination of ORV activities among recreationists, neighboring home and landowners, resources and resource managers. Closing 70 acres in the South Hills to ORV use should reduce conflicts between ORV users and neighboring homeowners. The BLM would maintain the option of closing the Shepherd Ah-Nei Environmental Education Area to ORV use if conflicts become too numerous. The BLM would open five roads on the west side of the Pryor Mountains in response to the U.S. Forest Service opening their connecting roads. The Turkey Flat road is needed only for administrative access to a wild horse trap and use of this road would remain restricted in order to protect wilderness values.

# **Environmental Education**

# Resource Objectives and Recommendations

The existing environmental education facilities on 77 acres would be maintained at the Shepherd Ah-Nei site as long as local groups indicated an interest in the area. If excessive vandalism occurs, the facilities would be removed and local schools would be asked to furnish comfort stations if they become necessary.

The Acton site consisting of 133 acres would not be developed until the Shepherd site use exceeds the carrying capacity of 6,000 visitors annually, or the schools express an interest in developing this area.

# Rationale

This proposed action would allow BLM to continue serving the Billings school system and the public with an environmental education area and has the flexibility to allow the development of an additional education area if the demand warrants.

# Wild Horse Interpretation

# Resource Objectives and Recommendations

Interpretation of the Pryor Mountain wild horses and their management would be pursued as a cooperative venture between the BLM; the U.S. Forest Service, (Custer National Forest); and the NPS (Bighorn Canyon National Recreation Area). Developments formerly proposed in an already completed activity plan would not be pursued at this time. However, some additional interpretation is possible, dependent upon the outcome of the wild horse herd management plan which is to be completed by the three agencies.

Major interpretive efforts would be centered at the Lovell, Wyoming, NPS Visitor Center. Upon completion of the herd management plan, a roadside interpretive panel may be placed along the Bad Pass Highway within the Bighorn Canyon National Recreation Area. Interpretation on BLM administered lands would be limited, in most respects, to six boundary or roadside signs. No major structure or overlook is anticipated on BLM administered lands at this time though the possibility remains for development of such facilities in the future, depending on demand and budgetary capabilities.

# Rationale

The Pryor Mountain wild horses graze on lands administered by the Bureau of Land Management (designated wild horse range), the U.S. Forest Service, Custer National Forest (undesignated lands) and the NPS (undesignated lands). As such, wild horse interpretation should be conducted on a cooperative basis with these agencies at a central location, preferably at the NPS visitor center in Lovell, Wyoming.

In addition, individuals visiting the PMWHR are most apt to view wild horses near the NPS Bad Pass Highway, which traverses the Bighorn Canyon National Recreation Area.

Because of these factors, the Winddrinker overlook site is not the most likely area from which to view wild horses since watering facilities which horses frequent are located approximately ½ mile north of the site and are partially hidden by the topography. Costly road improvements would also have to be made to the location and considerable Federal funds expended to develop interpretive facilities. The proposed location of the Winddrinker site is encumbered by the existence of significant archeological values which could be disrupted by any development.

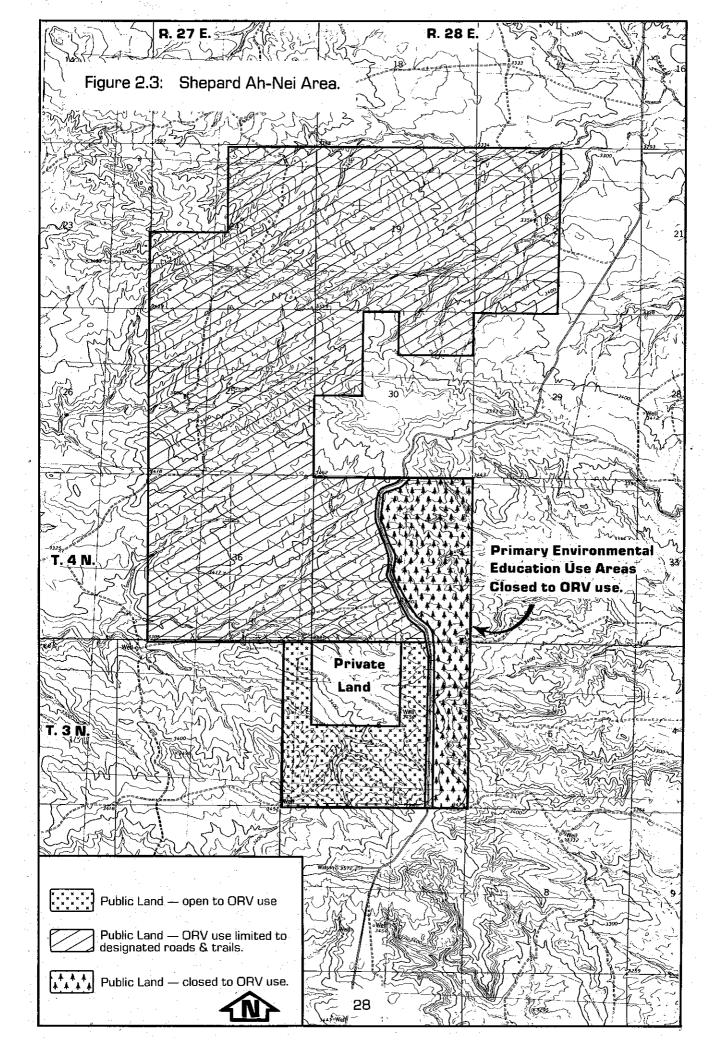


Figure 2.4: South Hills ORV Area.

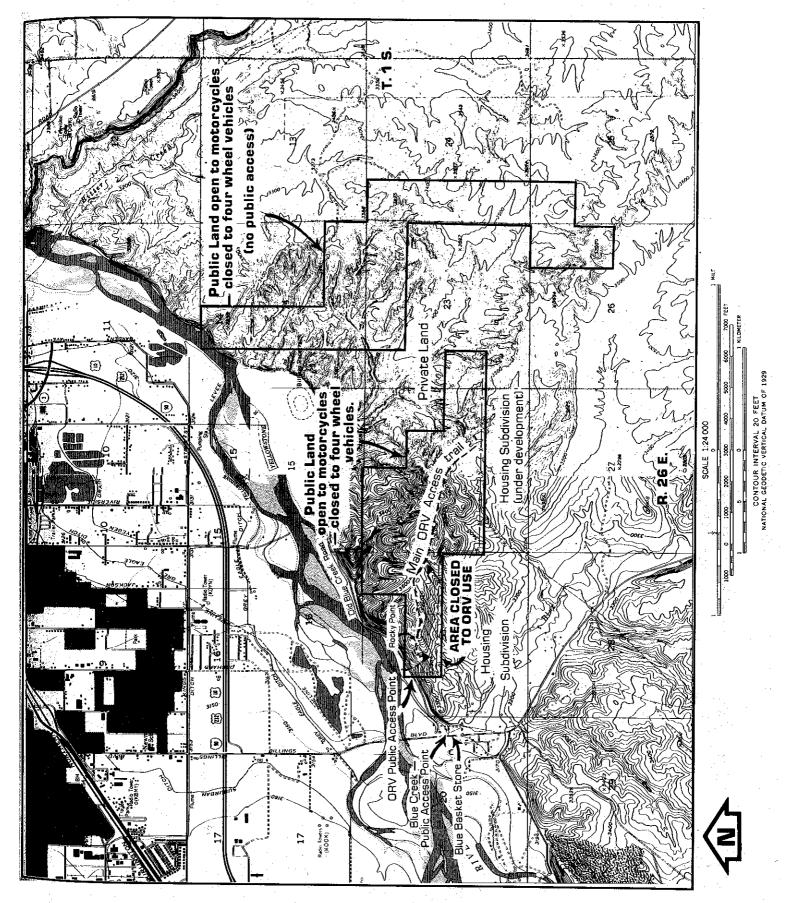
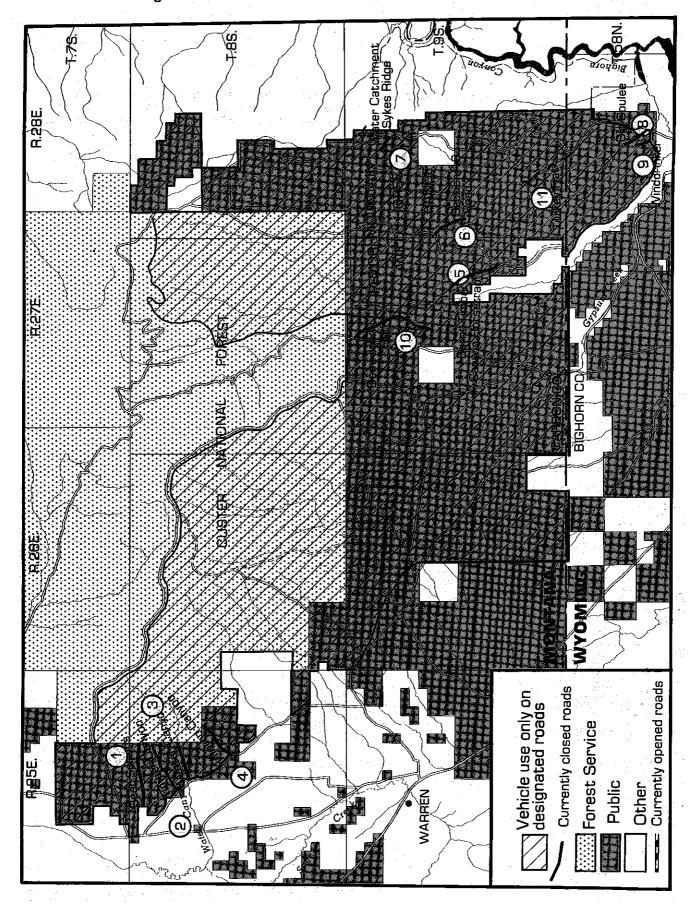


Figure 2.5: Current ORV Designation.



# Wilderness

# **Resource Objectives and Recommendations**

This proposed plan recommends that the 6,870 acre Twin Coulee Wilderness Study Area (WSA) be recommended nonsuitable for wilderness designation. The entire Pryor Mountain WSA consisting of 16,927 acres and a portion of the Burnt Timber Canyon Unit containing 3,430 acres would be recommended suitable. A 525 acre parcel in the southeastern portion of the Burnt Timber Canyon Unit would be recommended nonsuitable. The southern portion of the Big Horn Tack-On Unit containing 2,550 acres would also be recommended suitable, while the northern portion of this unit consisting of 2,000 acres would be recommended nonsuitable. (See Table 2.4 and Figures 2.6, 2.7, 2.8 and 2.9.)

If Congress selects this proposal, multiple use management on 9,395 acres in the Twin Coulee, Big Horn Tack-On and a small portion of the Burnt Timber Canyon Unit would become the resource objective for these areas.

In the Pryor Mountain WSA and portions of the Burnt Timber Canyon and Big Horn Tack-On Units, the objective would be to manage the areas to preserve their wilderness values while allowing other resource uses only where such usage would not cause damage to, or loss of wilderness values.

# Rationale

- The commercial timber values in the Twin Coulee WSA outweigh the marginal wilderness values. In addition, the majority of the area is heavily timbered and the primary recreational use areas are confined to a few open ridge tops and canyon areas. The adjacent National Forest lands are not being recommended for wilderness designation and the relatively small size of the areas likely to be used by recreationists would offer marginal wilderness opportunities.
- The Pryor Mountain WSA contains some of the most rugged isolated portions of the Pryor Mountain range. The wide expanses and topographic screening provided in this area offer outstanding wilderness values. This area is in the heart of the PMWHR and the supplemental attributes of free roaming wild horse herds enhances

the wilderness characteristics found in the area. There are no overriding resource conflicts in the area such as mineral values or domestic livestock grazing which would compromise a wilderness recommendation. This is also true of the Big Horn Tack-On and Burnt Timber Canyon Units.

The Burnt Timber Canyon Unit is a physiographic extension of the U.S. Forest Service Lost Water Canyon wilderness study area which has been recommended for wilderness designation. The deeply incised canyon, limestone caves and overhangs and other natural attributes as described in Chapter 3 of this document provide exceptional wilderness values. The boundary modification eliminating 525 acres from the recommended area is located in Sections 23 and 24 of T.9 S., R. 27 E. This area has been impacted by uranium prospecting and there are a number of open pits and areas where a dozer or backhoe has been used to access test pits. The northwestern portion of the excluded area also contains a large wild horse trap.

The southern portion of the Big Horn Tack-On Wilderness Study Unit (WSU) provides a 9 mile common boundary with the NPS Bighorn Canyon wilderness study area. This contiguity in association with the BLM Pryor Mountain WSA is important to the potential wilderness management of the general area and the total area provides outstanding wilderness opportunities.

The northern portion of the Big Horn Tack-On WSU is somewhat isolated from the other Pryor Mountain proposed wilderness areas by state and private lands. The nonpublic lands are currently experiencing heavy motorized recreational use during the spring, summer and fall months.

This portion of the study area has approximately ½ mile of common boundary with the NPS Bighorn Canyon WSA. A large portion of this area consists of a steep mountain face accessible from and within view of the U.S. Forest Service Dryhead Overlook. Because of the boundary configuration and adjacent land uses, this area would not contribute positively to the overall wilderness management of the remainder of the Pryor Mountain study units.

# **TABLE 2.4: WILDERNESS SUITABILITY RECOMMENDATIONS Acreage Recommended** Study Area Acreage Recommended Suitable Non-Suitable Twin Coulee WSA MT-067-212 6.870 acres Pryor Mountain WSA MT-067-206 16.927 acres **Burnt Timber Canyon** WSU MT-067-205 3,430 acres 525 acres Big Horn Tack-on WSU MT-067-207 2,550 acres 2,000 acres

Figure 2.6: Alternative Map — Twin Coulee Wilderness Study Area.

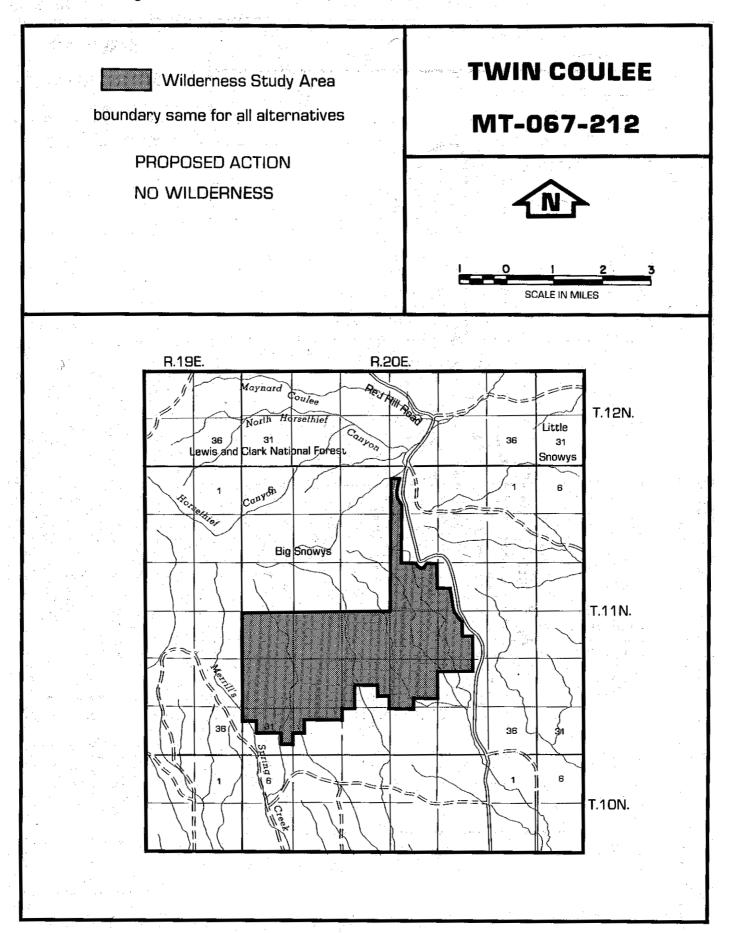


Figure 2.7: Alternative Map — Pryor Mountain

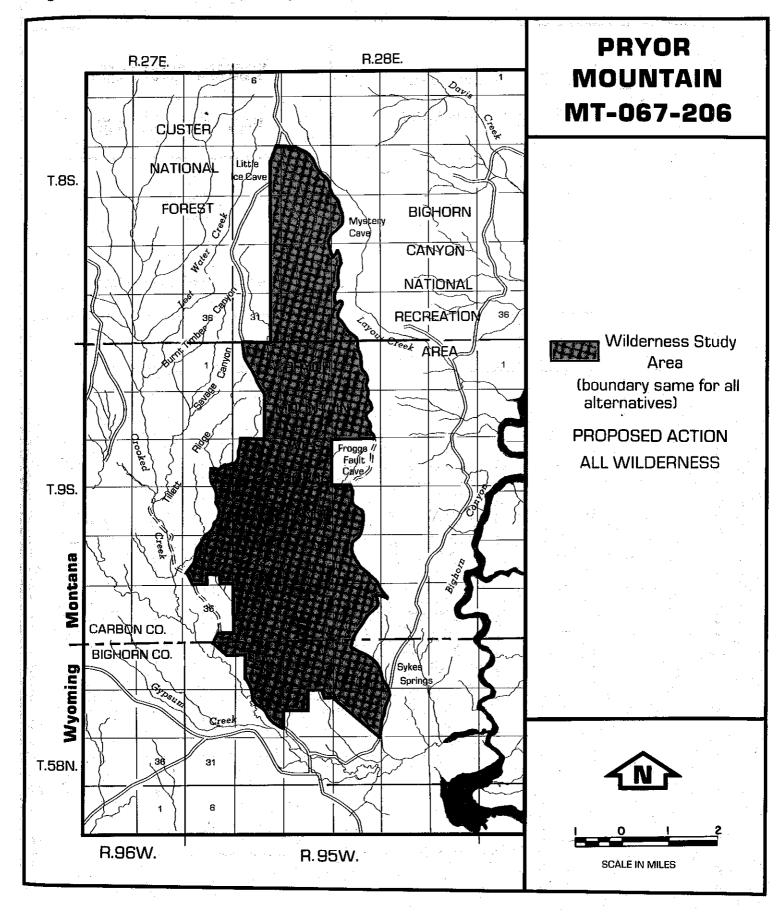


Figure 2.8: Alternative Map — Burnt Timber Canyon.

(ALVE

Wilderness Study Unit (boundary same for all alternatives except proposed action)

PROPOSED ACTION
PARTIAL WILDERNESS

BURNT TIMBER CANYON

MT-067-205





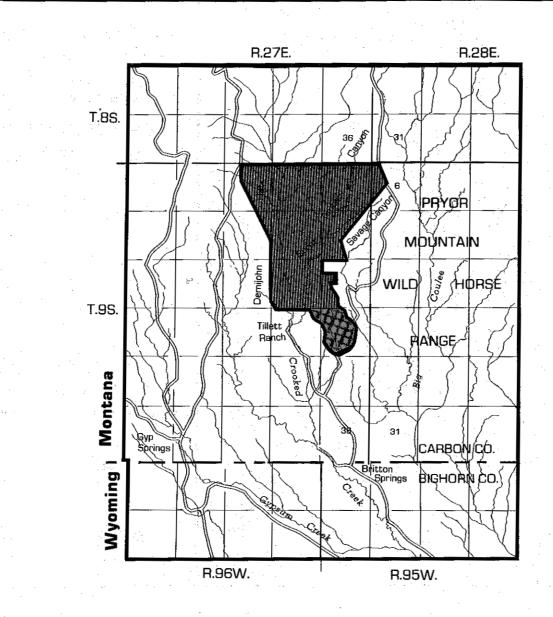


Figure 2.9: Alternative Map — Big Horn Tack-On.

